

FIG. 1

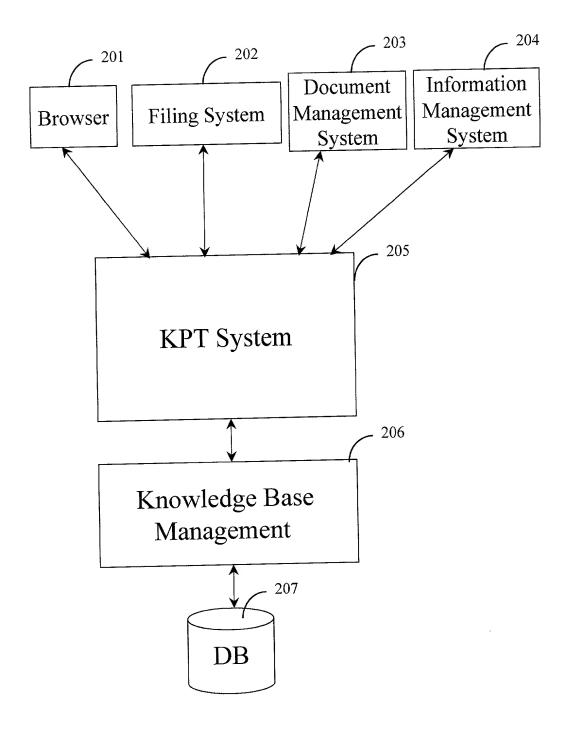


FIG. 2

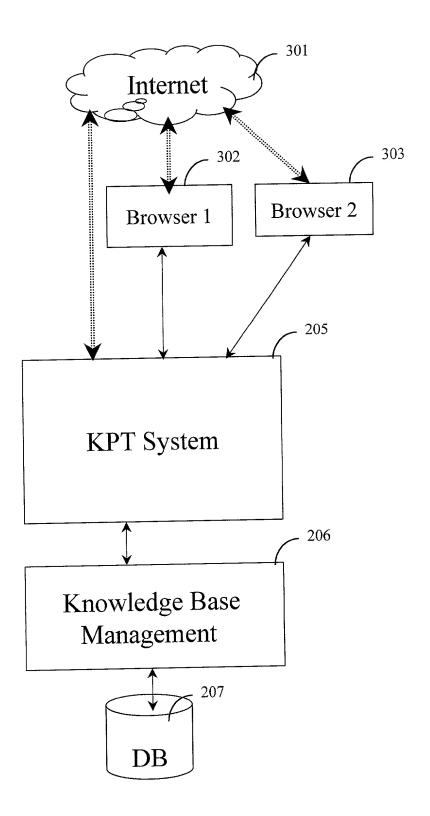


FIG. 3

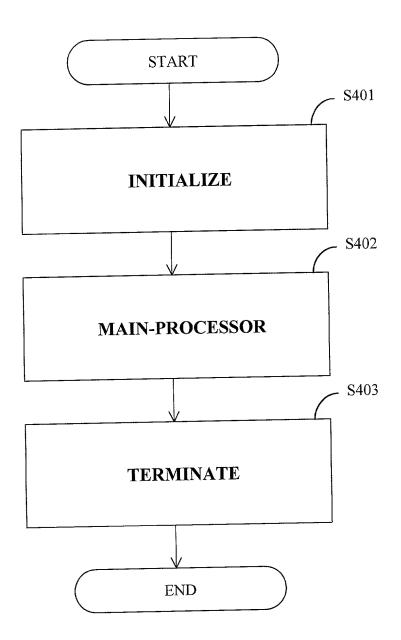
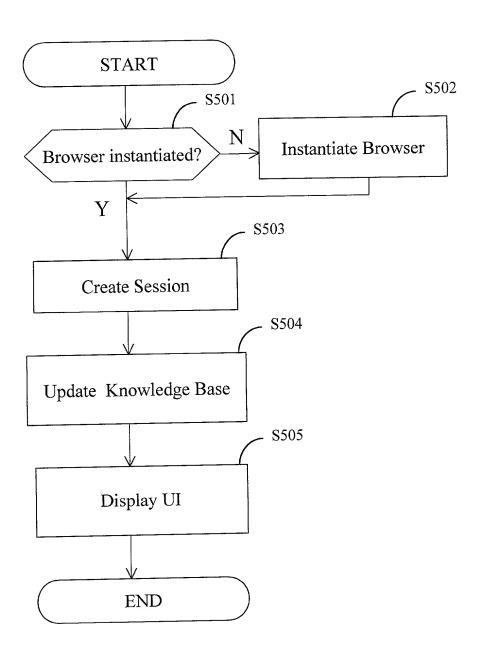
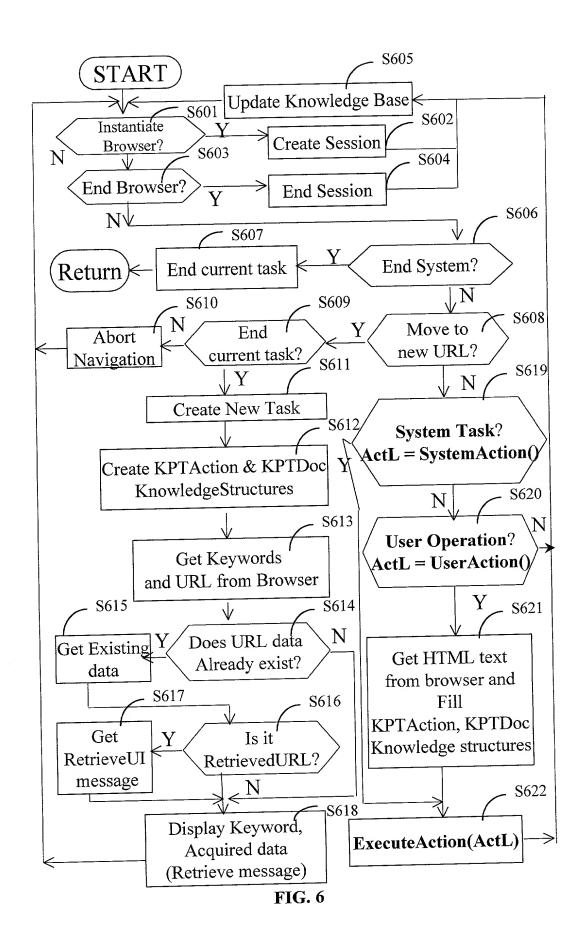
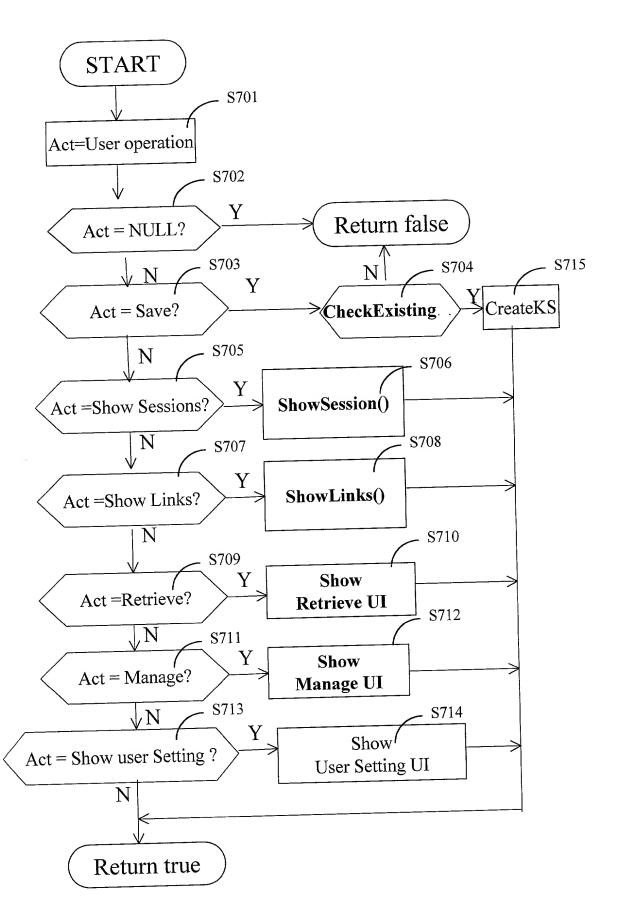


FIG. 4



**FIG. 5** 





**FIG.** 7

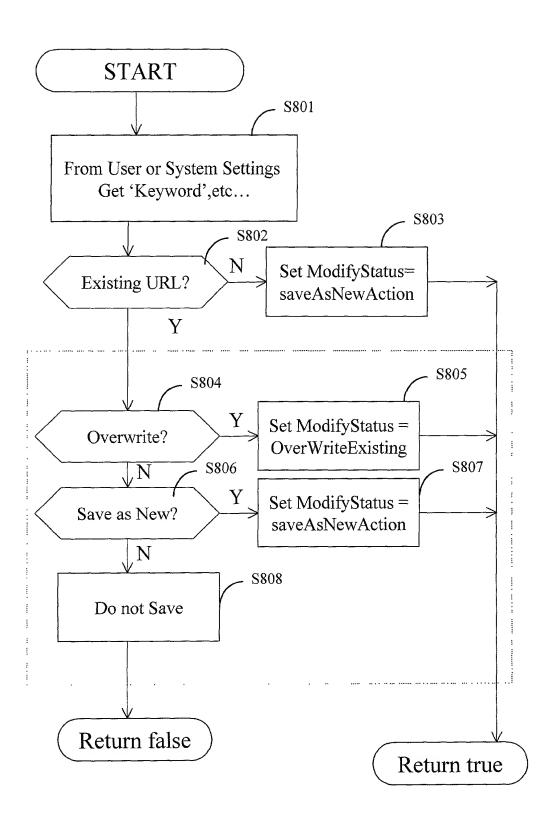


FIG. 8

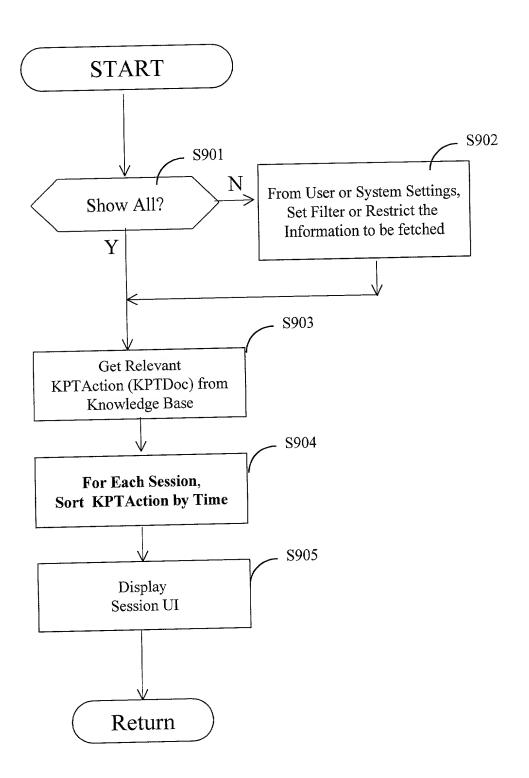
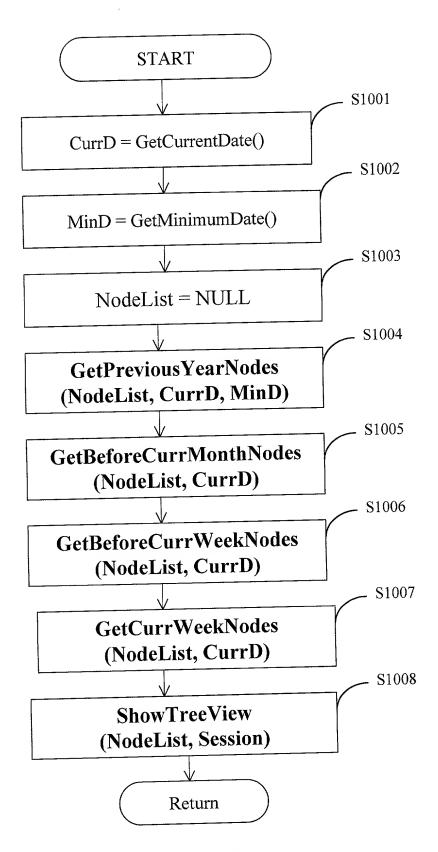
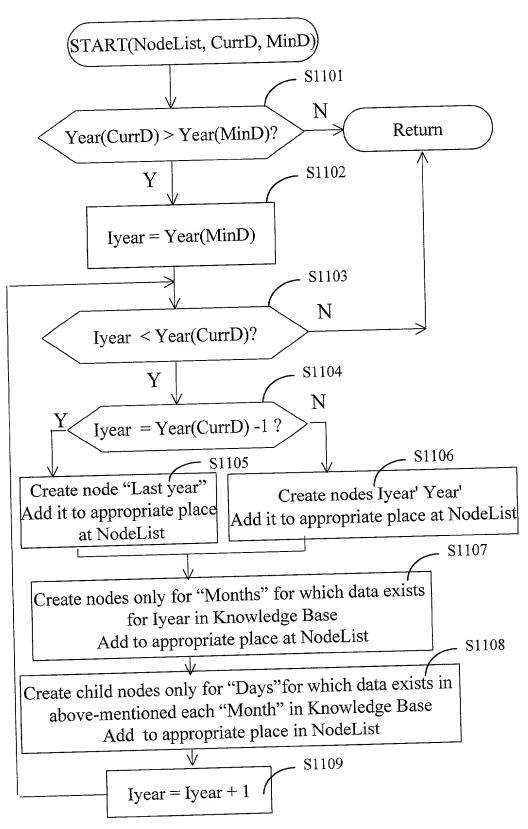


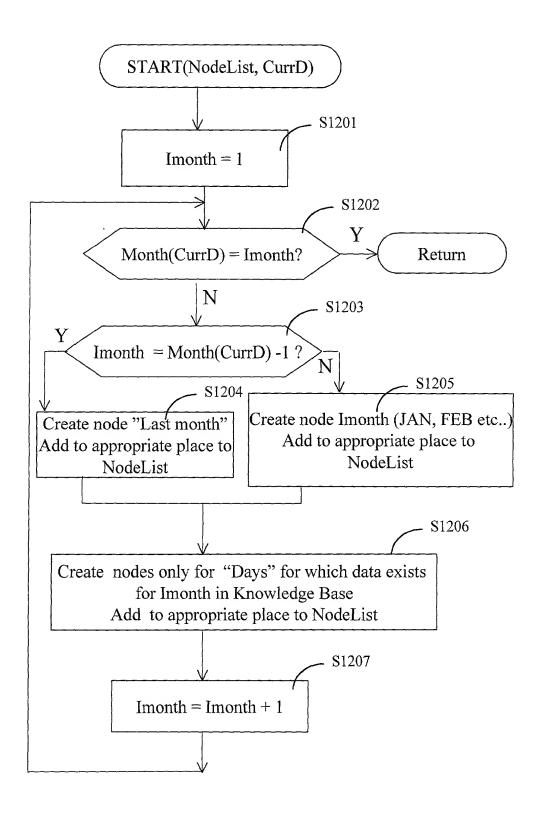
FIG. 9



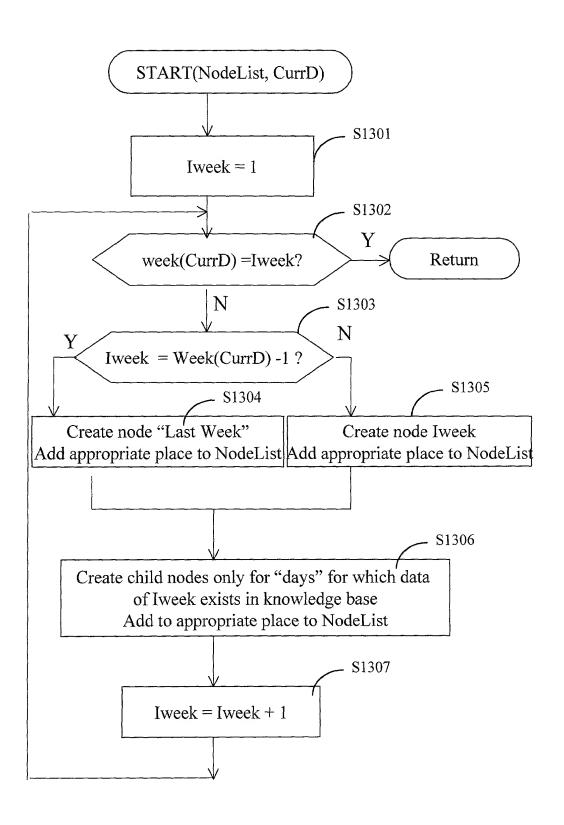
**FIG. 10** 



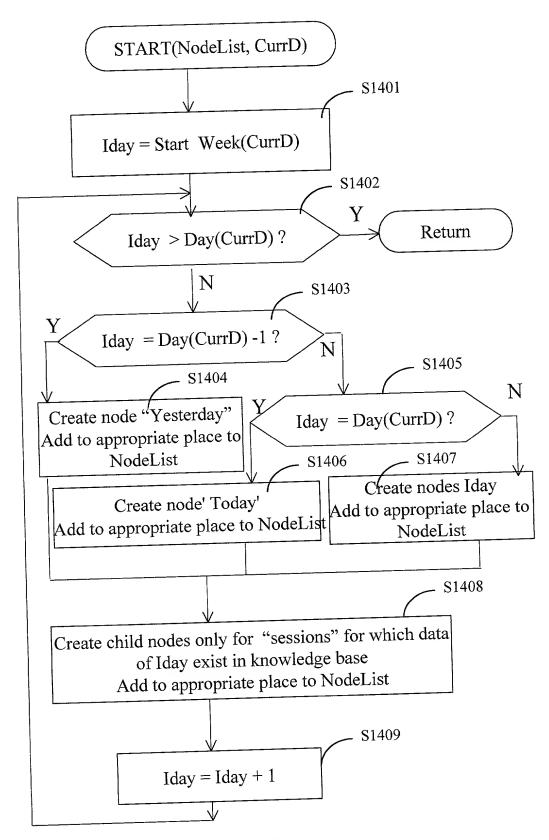
**FIG. 11** 



**FIG. 12** 



**FIG. 13** 



**FIG. 14** 

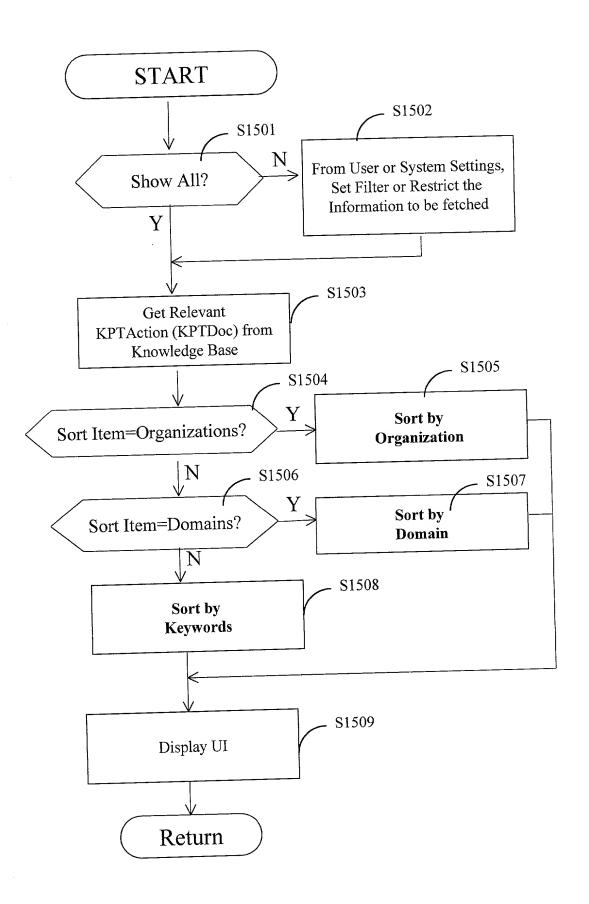
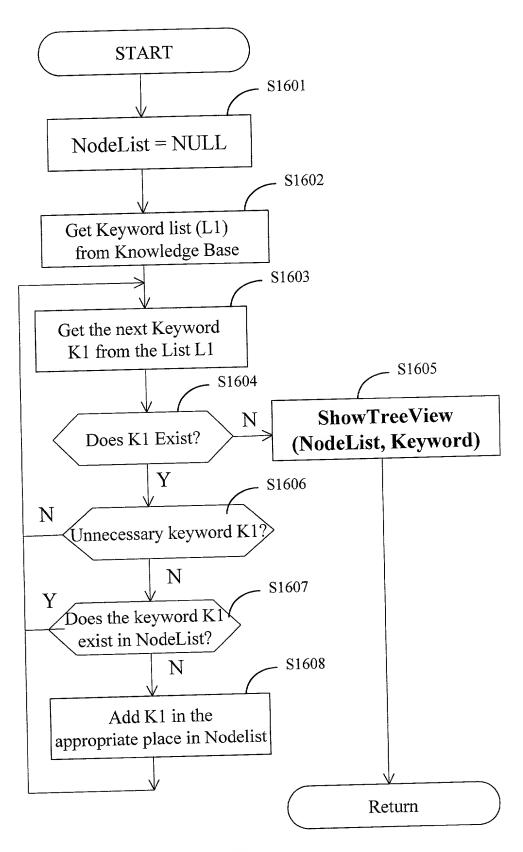


FIG. 15



**FIG. 16** 

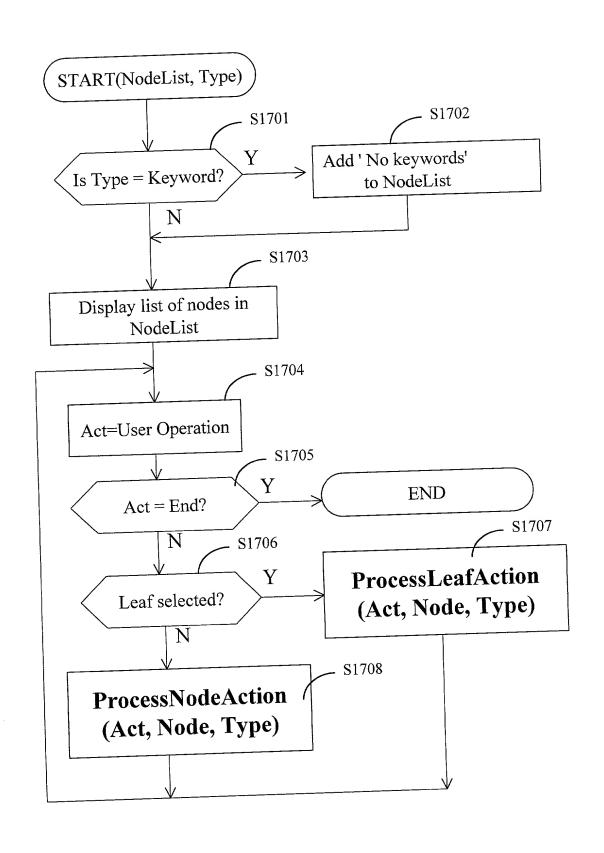
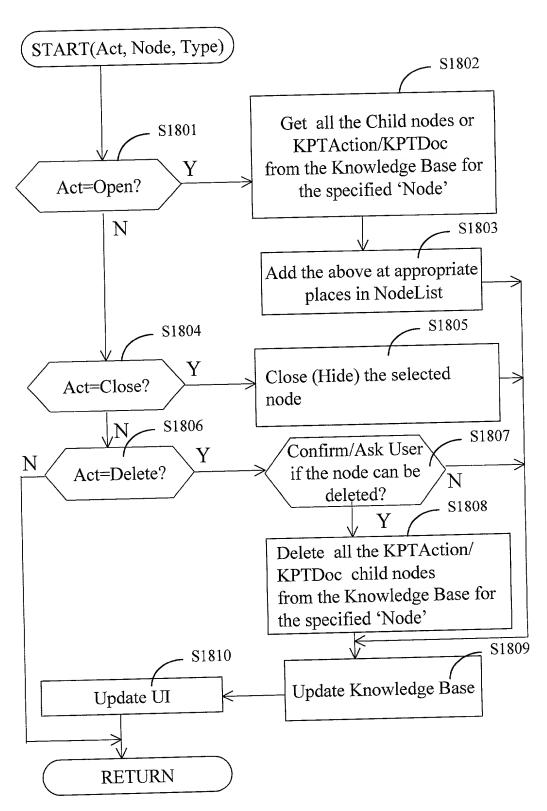


FIG. 17



**FIG. 18** 

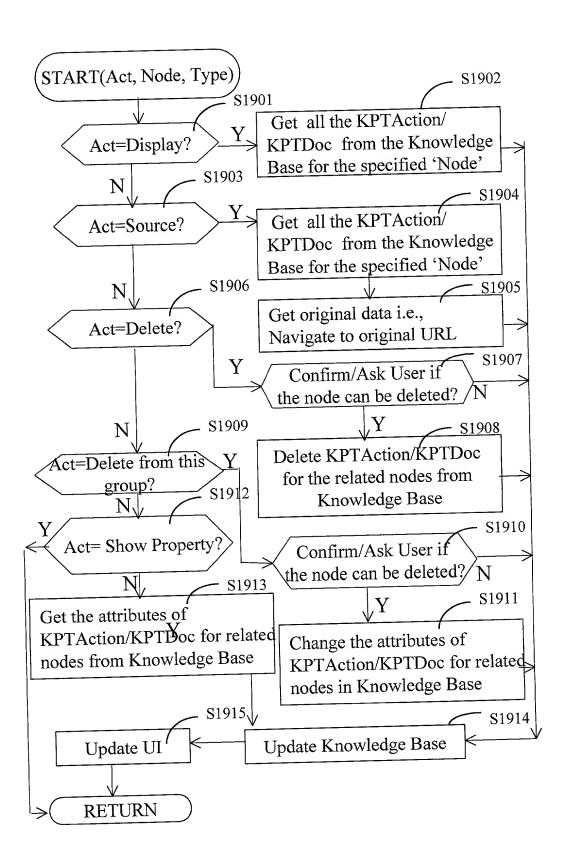


FIG. 19

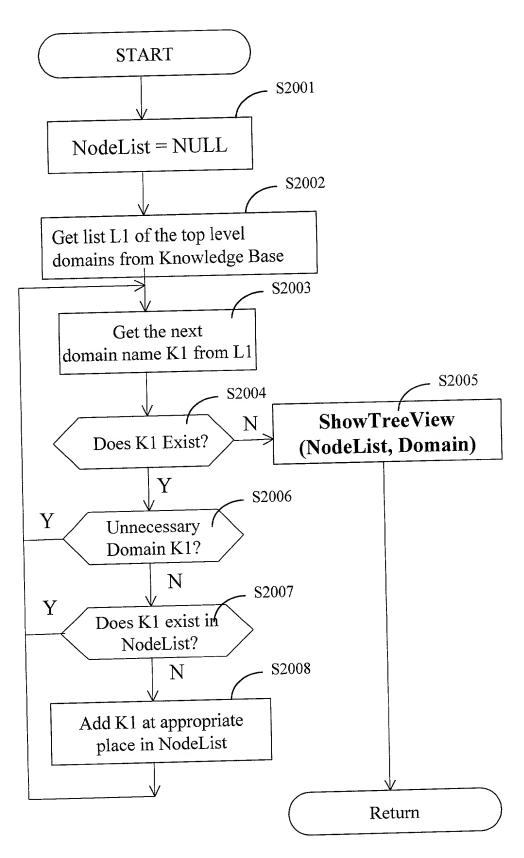


FIG. 20

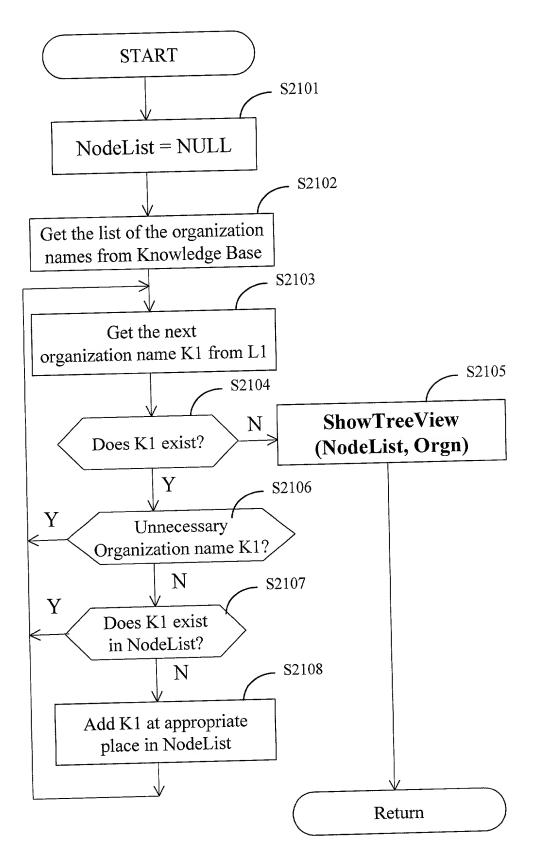
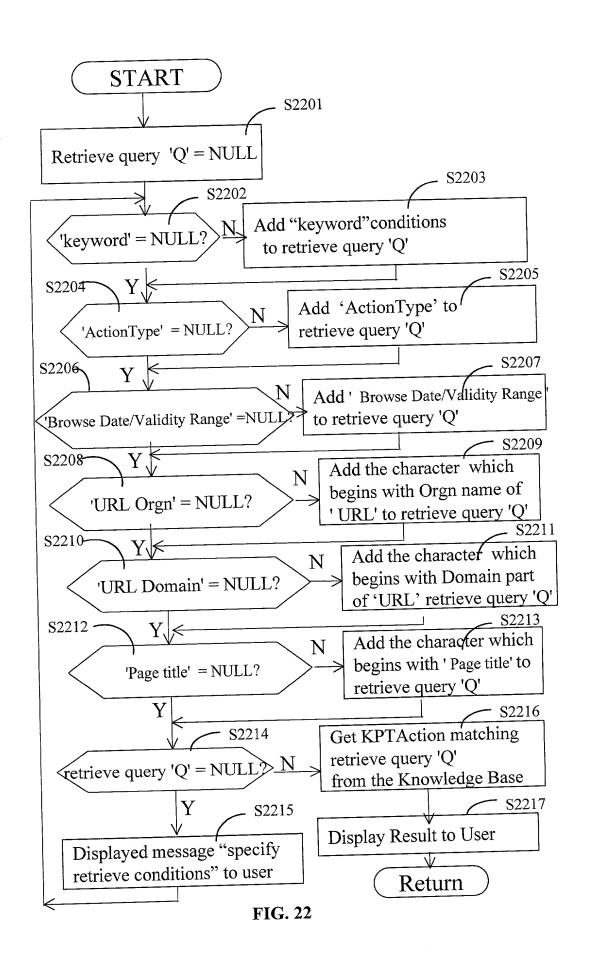
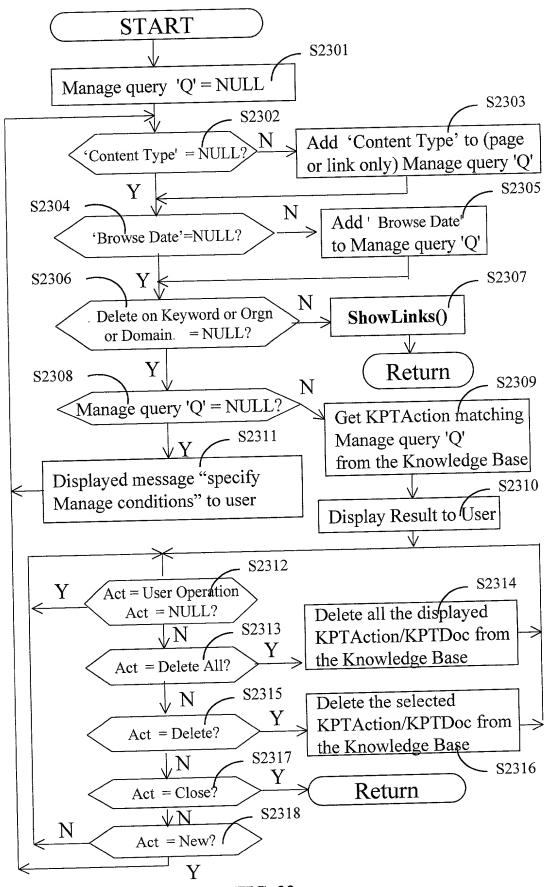


FIG. 21





**FIG. 23** 

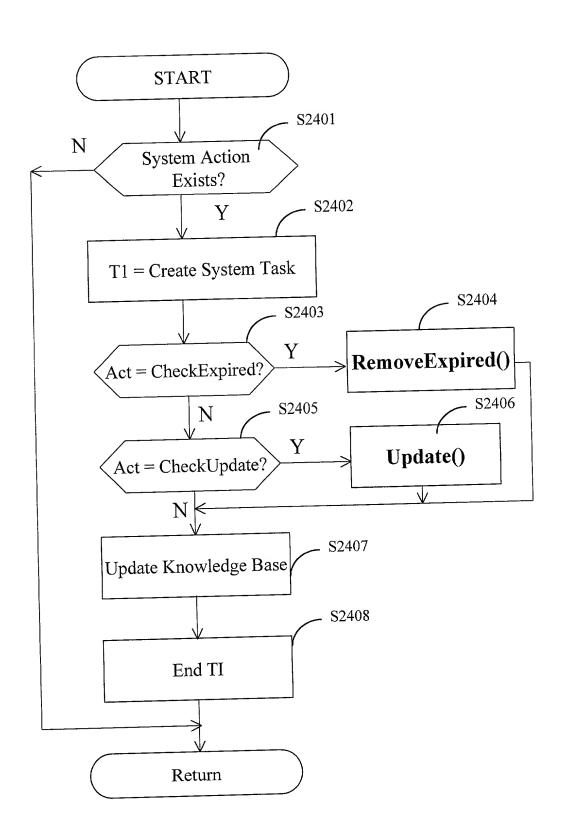


FIG. 24

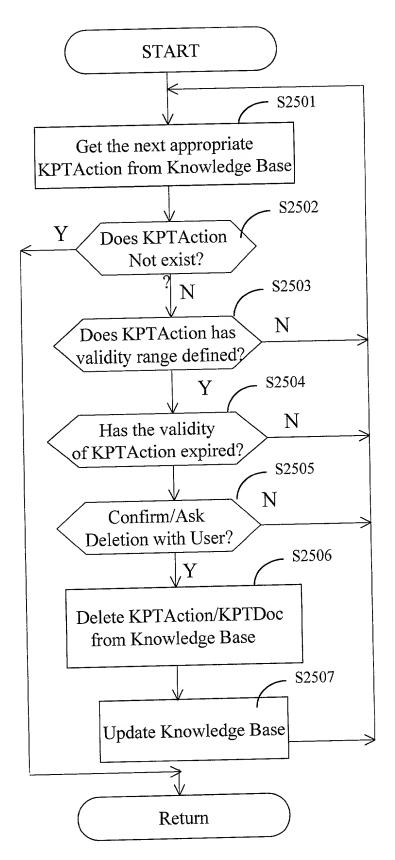


FIG. 25

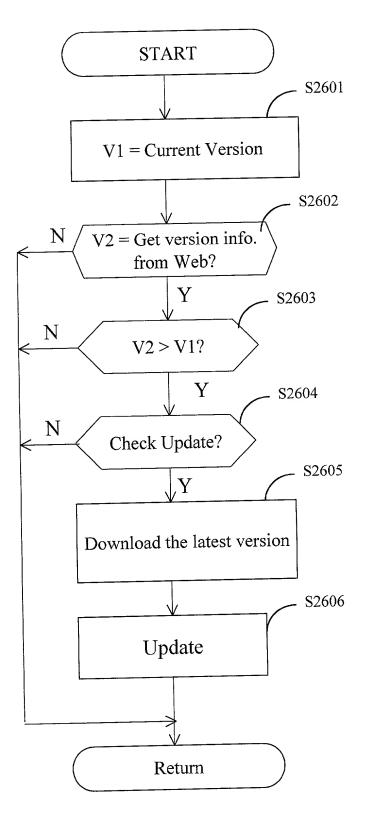
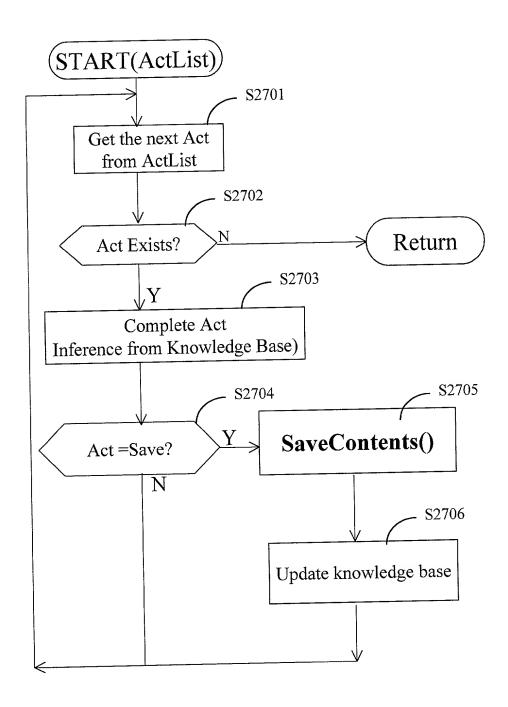
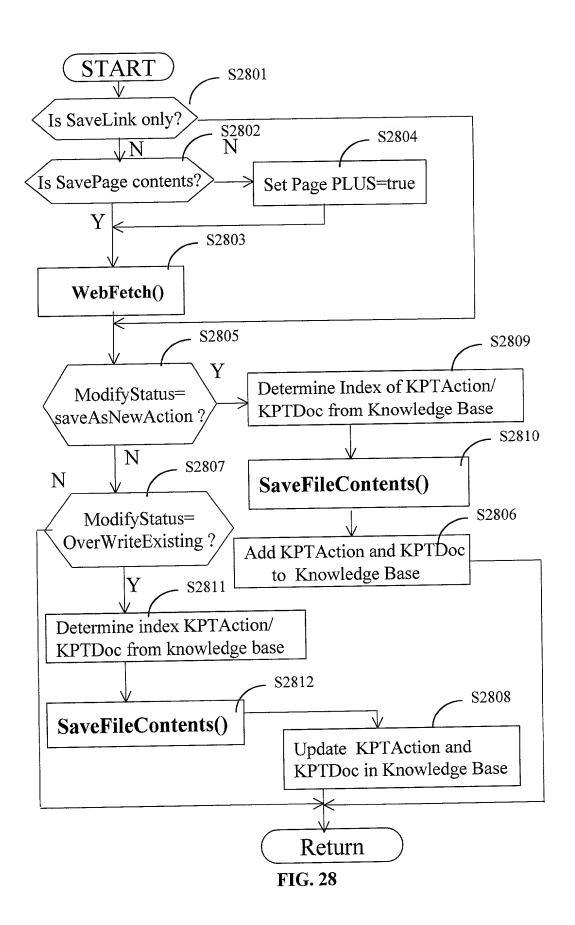
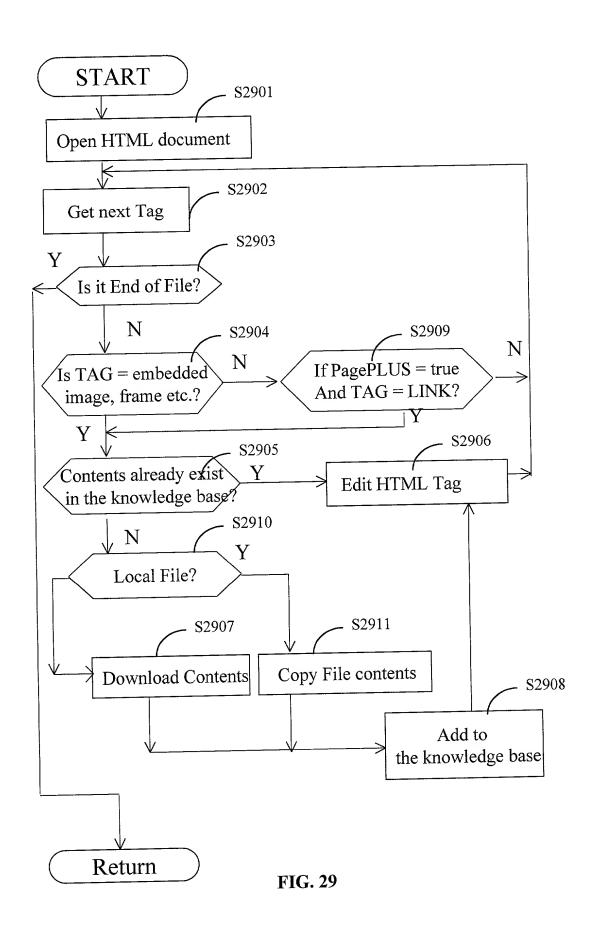
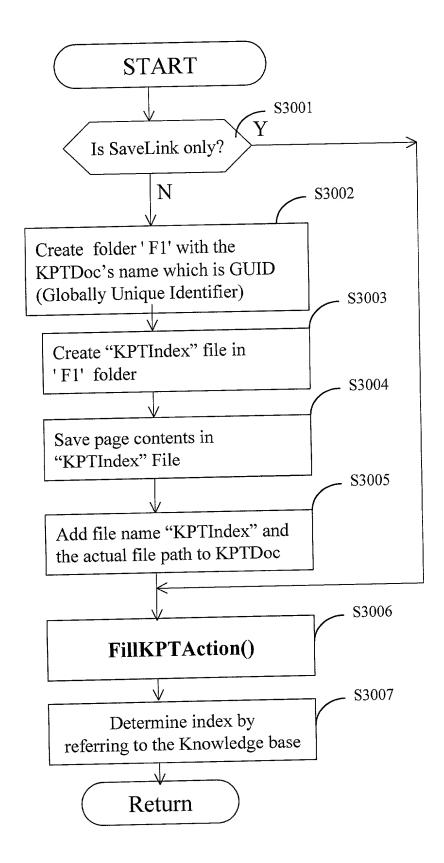


FIG. 26

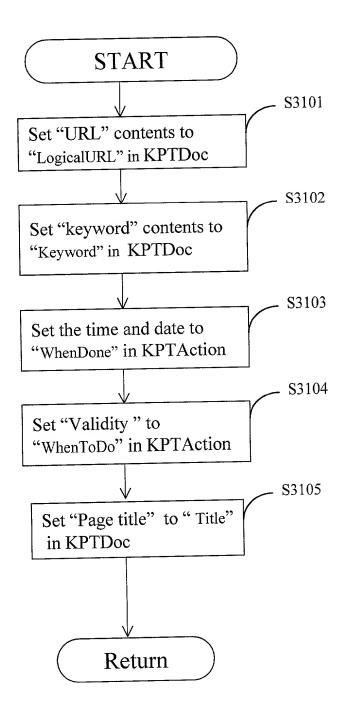




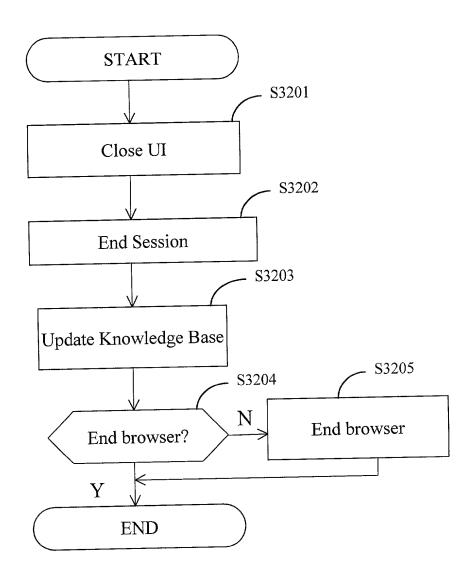




**FIG. 30** 



**FIG. 31** 



```
(a)
         KPTConcept
            KPTConcept
                                  KPTObjID
             ObjectID
                                  KPTStatus
             ModifyStatus
(b)
          KPTPerson
            KPTPerson: KPTConcept
                                   String
              RememberAs
                                   String
              Name
                                   String
              Phone
                                   String
              Email
                                   String
              Fax
                                   String
              URL
          KPTDocument
(c)
             KPTDocument: KPTConcept
                                   String
              RememberAs
                                   String
              Name
                                   String
              PhysicalURL
                                   String
              LogicalURL
                                   String
              Orgn
                                   String
              Domain
                                    String
              Keywords
                                    String
               Title
                                    String
              FolderName
                                    KPTLinkType
              LinkType
                                    bool
               RetrievedDoc
```

```
(a)
      KPTAction
         KPTAction: KPTConcept
                              KPTActionType
          Type
                              KPTPerson
          Actor
                              KPTConcept //Doc or Action
          Object
                              KPTConcept
          From
                               KPTConcept
          To
                              KPTInstrumentType
          How
                              KPTTime
          WhenToDo
                              KPTTime
          WhenDone
                               KPTConnenctionList
          ConnectedTo
                              KPTObjID
          SessionID
                              KPTActSysStatus
          ActionStatus
                              KPTUsrStatus
          UserStatus
                              KPTImportance
          ActImportance
```

```
KPTContent

KPTContent: KPTConcept

{
    URL String
    FileName String
    KPTDocID KPTObjID
    ContentType KPTMimeType
    ContentLength long
    ...
}
```

(a)
KPTDoc Knowledge Base

ObjectID	KeepA	sLogicalURL	Orgn	Domain	Keywords	Folder	
D630a816 D630a932 D630b232 D233x123 D133f822 D2340x13	KPT Saora	kpt.com/faq saora.com sales.paltek.com	saora kpt kpt saora paltek,sales hns, sales	COM COM	KPT, Yoko. KPT ALTERA, Kiosk, India	D630a932 D233x123 D133f822	
		saies.ms.ne.jp		JP.INE		D2340X13	

## (b) KPTAction Knowledge Base

ObjectID	Type	KPTDocID	Done Time	SessionID	ValidTime	
A238x231	StartSE		00/03/10 13:38:02			
A238x123	Save	D630a816	00/03/10 13:38:22	A238x231	00/03/10~01/03/10	$ \cdots $
A238x232	Save	D630a932	00/03/10 14:18:42	A238x231	00/03/10~	…
A980o232	EndSE		00/03/10 14:20:15			
A909u898	StartSE		00/04/19 12:12:00			
A323f229	Save	D630b232	00/04/19 12:22:13	A909u898	00/04/25~00/04/30	$ \cdots $
A902o230	EndSE		00/04/19 14:12:23			
A721n292	StartSE		00/04/19 12:12:00			
A723b232	Save	D630a816	00/04/19 12:12:23	A721n292		
		···				

(a) KPTPerson Knowledge Base

ObjectID	KeepAs	Name	Email	Phone	Extracted	•••
P324o902 P421y232 P234x234	Kato		support@saora.co kato@saora.com siva@hns.com 			
						- • •

## (b)

## **KPTContent Knowledge Base**

ObjectID	URL	Filename	KPTDocID	Content Type	ContLen	
F802u233 S F232q897 F329x800	saora.co.jp/logo.gif saora.co.jp/jap.gif kpt.com/img/logo.gif kpt.com/music/a.mid 	logo.gif jap.gif logo1.gif	D630a816	IMAGE/GIF	212 128 232	

## **Domain Knowledge Base**

Domain Knowledge Da	se
# Generic Domains	
.com,	.COM (Commercial Domains)
.edu,	.EDU (Educational Domains)
.gov,	US Government
.mil,	US Dept of Defense
.net,	.NET (Network Domains)
.org,	.ORG (Organization Domains)
# Country Code Doma	
.ac,	Ascension Island
.ad,	Andorra
.ae,	United Arab Emirates
af,	Afghanistan
.ag,	Antigua and Barbuda
.ai,	Anguilla
al,	Albania
.aq,	Antarctica
.jp	Japan
.ad.jp,	Administrative
.ac.jp,	Universities
.co.jp,	Commercial Organizations
.go.jp,	Government Organizations
.or.jp,	Non Commercial Organizations
.ne.jp,	ISP
.ru	Russia
.ac.ru,	Academic Community
.com.ru,	Commercial Organizations
.edu.ru,	Universities
.int.ru,	For public registration
.mil.ru,	Military Establishment
.net.ru,	Internet Service Providers
.org.ru,	Non Commercial Organizations
.pp.ru,	Private Person's domain

## Example Rules for Determining the Organization Indices for an URL

For the Given Input URL,

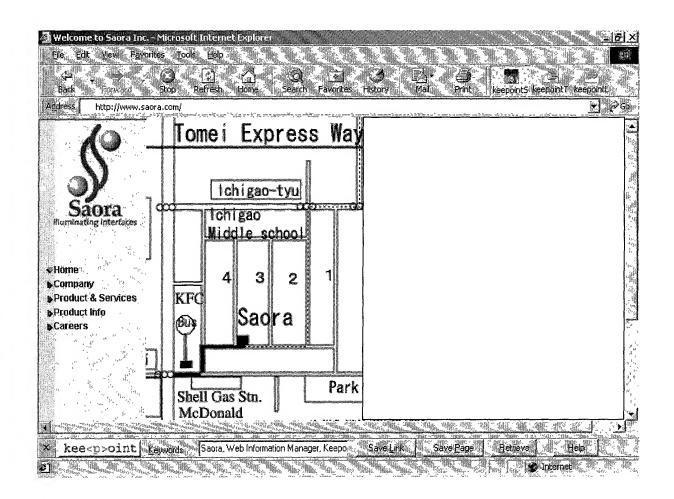
- Get the fully qualified URL and remove the parameters e.g., Input: http://www.saora.co.jp/contact.asp?userid=2323
  Output: http://www.saora.co.jp/contact.asp
- Remove the protocol, like http://, https://, ftp:// from the URL e.g., Input: http://www.saora.co.jp/contact.asp
   Output: www.saora.co.jp/contact.asp
- Remove the obvious address e.g., www, www2, etc. from the URL e.g., Input: www.sales.saora.co.jp/contact.asp Output: sales.saora.co.jp/contact.asp
- Remove the page information from the URL e.g., Input: sales.saora.co.jp/contact.asp
  Output: sales.saora.co.jp
- Get the domain information from the Domain Knowledgebase and Strip the domain information from the URL and get the organizations e.g., Input: sales.saora.co.jp Output: Organization(s) are -> sales, saora

## Example Rules for Determining the Domain Indices for an URL

For the Given Input URL,

- Get the fully qualified URL and remove the parameters e.g., Input: http://www.saora.co.jp/contact.asp?userid=2323
  Output: http://www.saora.co.jp/contact.asp
- Remove the protocol, like http://, https://, ftp:// from the URL e.g., Input: http://www.saora.co.jp/contact.asp
  Output: www.saora.co.jp/contact.asp
- Remove the obvious address e.g., www, www2, etc. from the URL e.g., Input: www.sales.saora.co.jp/contact.asp Output: sales.saora.co.jp/contact.asp
- Remove the page information from the URL e.g., Input: sales.saora.co.jp/contact.asp
  Output: sales.saora.co.jp
- Get the domain information from the Domain Knowledgebase e.g., Input: sales.saora.co.jp

  Output: Domain is .co.jp



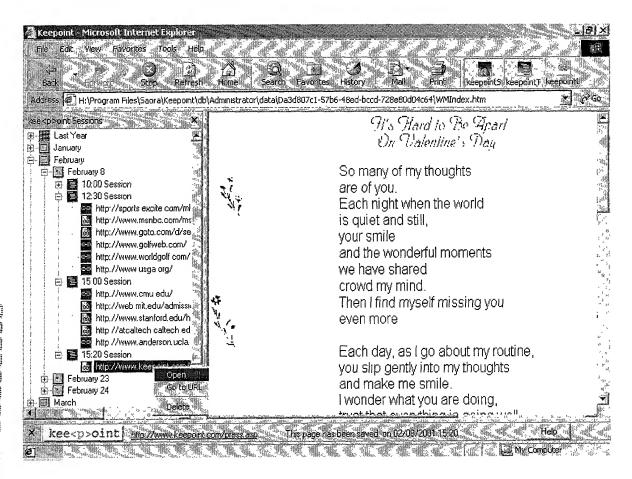
```
<html><head>
<title>Welcome to Saora Inc.</title>
<meta name="KEYWORD" content="Saora, Web Information"≯
<meta http-equiv="Content-Type"content="text/html;charset=x-sjis">
</head>
<body bgcolor="#FFFCC">
<table border="0" cellpadding="0" cellspacing="0" align="center"
width="906"> 
 <td width="114" valign="top" align="center" height="24"
rowspan="6"> <img src="www.saora.co.jp/logo.gif" width="50"
height="200" >
<img src="jap.gif" width="535" height="391" </td>
<font color="#400040">
 <strong><big>Train</big></strong></font>
 <font color="#0000FF">Tokyu Den-en Toshi Line ICHIGAO|
Station</font>
  <font color="#0000FF">Take Bus Nos. 305, 306 Izumita
Mukai (1 Minute) OR 20 Minutes Walk from the Station</font>

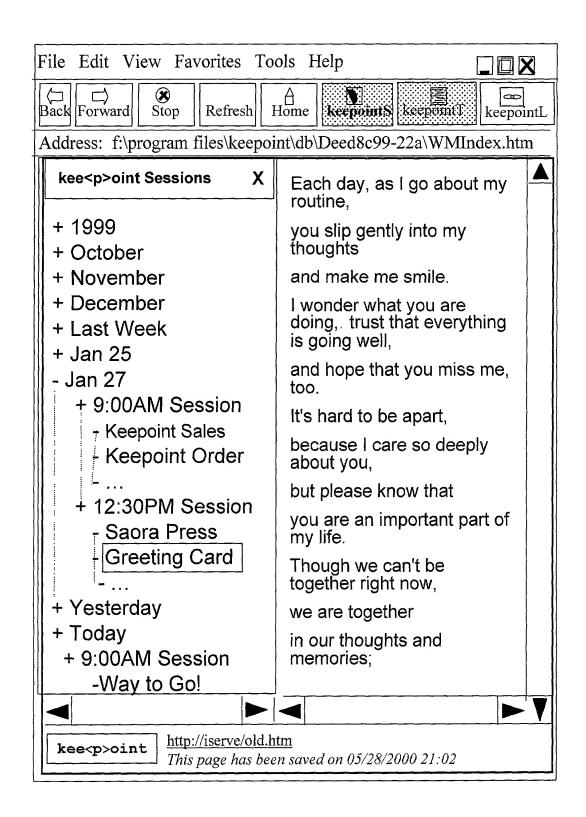
 valign="top" height="2">
<fort color="#400040">
                 <fort color="#0000FF">
045-913-9820</font> 
 <font color="#400040"></font>
 <font color="#0000FF">045-913-9821</font>  

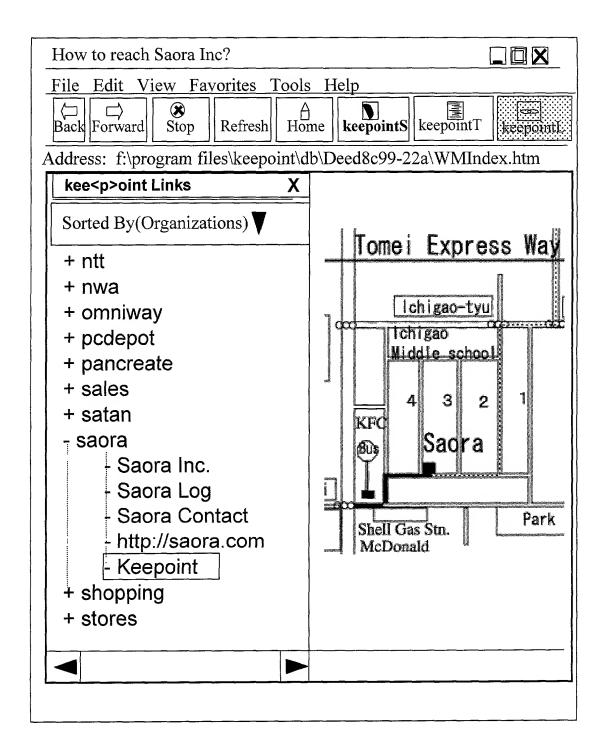
 ...
```

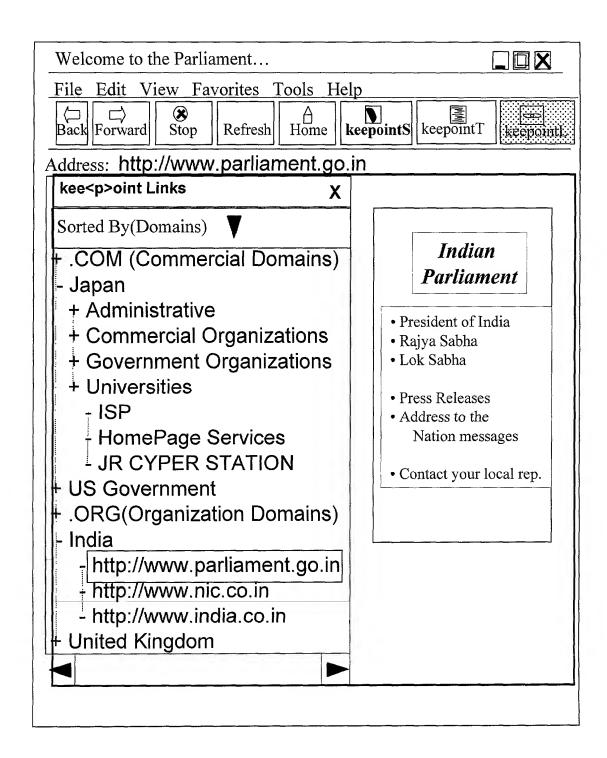
```
<html><head>
<title>Welcome to Saora Inc.</title>
<meta name="KEYWORD" content="Saora, Web Information ">
<meta http-equiv="Content-Type"content="text/html;charset=x-sjis">
</head>
<body bgcolor="#FFFCC">
<table border="0" cellpadding="0" cellspacing="0" align="center"
width="906">
 <td width="114" valign="top" align="center" height="24"
         <img src="KPTSYSKB/logo.gif" width="50"
rowspan="6">
height="200" >
<img src="KPTSYSKB /jap.gif" width="535" height="391"
<font color="#400040">
 <strong><big>Train</big></strong></font>
 <font color="#0000FF">Tokyu Den-en Toshi Line ICHIGAO
Station</font>
  <font color="#0000FF">Take Bus Nos. 305, 306 Izumita
Mukai (1 Minute)
 OR 20 Minutes Walk from the Station</font> 
 <font color="#400040">
<font color="#0000FF">045-913-9820</font> 

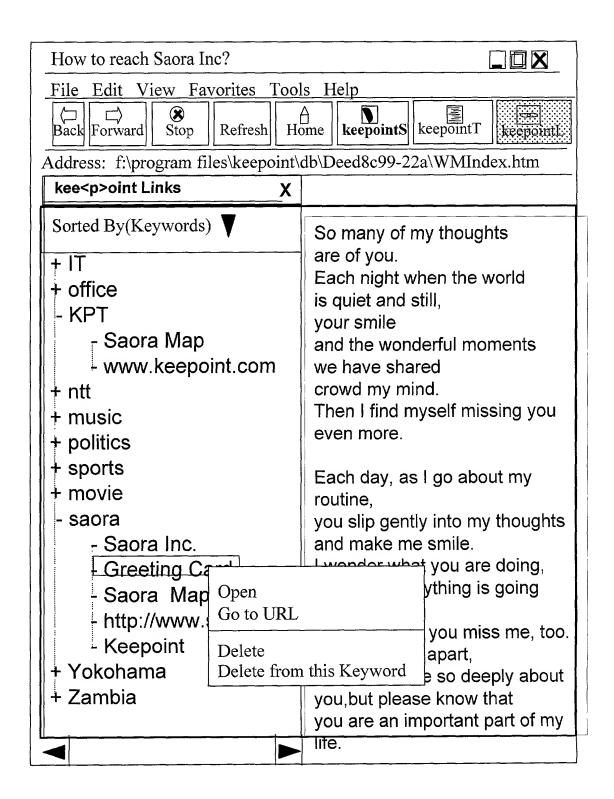
 <font color="#400040">
</font>
 <font color="#0000FF">045-913-9821</font>  
   ...
```





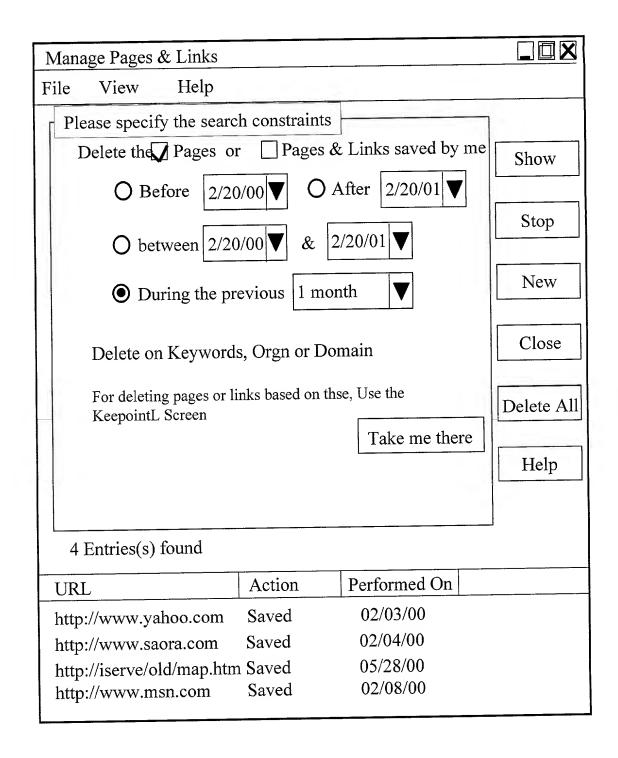




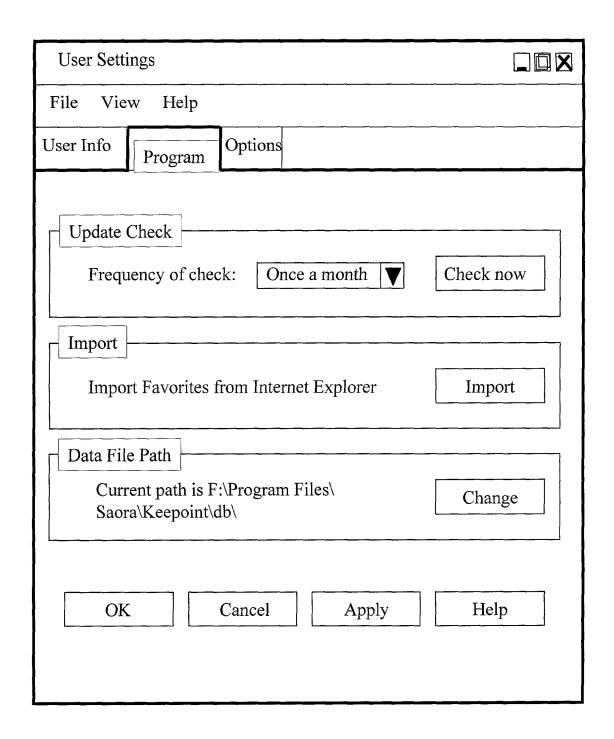


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http://www.msn.com Saved 02/08/00	

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Keywords:	Saora, KPT, Yokohama		
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Full Nar	ne:	Admin	istrator			
Email:		Admin	Admin@saora.co.jp			
Phone:		045-91	045-913-9820			
Fax:		045-91	13-9821			
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